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MINOAN DEFENSIVE ARCHITECTURE IN PALAIKASTRO AREA

Minoan civilization had for a long time been considered — and labelled as — very peaceful. Especially for the Neopalatial period — based on the classic Greek tradition preserved by Thucydides — the conception of the sc. Minoan Thallasok-racy and “Pax Minoica”¹ was formed. According to this tradition sustained till the end of 1970’s Cretan towns and palaces had no fortification, because potential attacks from outside were fought off in a safe distance by the strong Minoan fleet. Sir A. Evans himself on his journeys through Crete even before the research in Knossos came across a number of structures coming under the category “defensive architecture”² (labelled as “forts” or “guard stations”)³ and during the finds in Knossos he discovered remnants of probable fortification; however, it was he who used the term “Pax Minoica” and thus became the author of the “peaceful conception” of Minoan Crete.⁴ First on the basis of surface surveying some fortified settlements and structures are being discovered (in some cases rediscovered) from 1980’s on.⁵ That is why the conception of “Minoan peace” is being re-evaluated or

¹ See e.g. ALEXIOU 1969, 29, 36.

² The term suggested by the author. Apart from fortification walls, more complex entrance systems and facilities leading to restriction of the access to the building or to the area come under this category (e.g. the sc. guardrooms — rooms bound to the beginning of the entrance often interpreted as suggested and proved in many palaces and villas) and, of course, various guard structures and observation posts or towers in the countryside or in the vicinity of the settlement (e.g. the sc. guard houses discovered especially in connection with the road system within the “Minoan Roads Research Programme” frame (for bibliography see Chryssoulaki, 1999)).

³ A good survey on Evans’ journeys from the end of the 19th century — during which he discovered a whole range of such structures — is presented by BROWN 1993, 64–74 and eadem (ed.), 2001.

⁴ See e.g. EVANS 1928, 571.

⁵ The history of discovering and interpreting the defensive architecture is briefly described e.g. in CHRYSOULAKI 1999, 76–77. It is S. Alexiou who is to claim the greatest credit for (re)aiming one’s attention to Minoan fortifications (ALEXIOU 1979, 1981). Several scholars then followed his work by their field surveys and projects in the 1980’s — e.g. B. Rutkowski and K. Nowicki (*ArcheologiaWar* 1984 et seq.); Y. Tzedakis, S. Chryssoulaki et al.

rejected.⁶ One of the important sources for its re-evaluation is the existence of the defensive architecture in Palaikastro, a town settlement with its greatest bloom in the Neopalatial period. At the area of this settlement (situated on the east coast of Crete north of Kato Zakros) the author supports by evidence altogether 11 possible cases of defensive architecture of most various character, which was first labelled and described like this in the year 1984.⁷

THE CATALOGUE OF ARCHITECTURE

1) Wall sections east from the city centre

Approximately 200 m east of the centre of the settlement there is located a section of a massive wall built in the “Cyclopean” technique from gray-blue blocks of sideropetra with the rough dimensions of 0,6 × 0,6 m. The wall is preserved up to the height of two courses of masonry and in the length of about 20 m it leads along the hillside. Zielinski mentions a great amount of pottery from the Bronze Age in the wall as well as in its surroundings, but he also observes modern terrace walls in its vicinity, which — according to him — does not, unfortunately, quite guarantee its Minoan origin.⁸

The second, from the technological point of view very similar section of the wall is also located in the eastern direction from the city centre, but somewhat further and higher in the hillside. It has been preserved up to the height of three courses of masonry and up to the length of 30–35 m. The dating is not even in this case quite certain, but the construction-method as well as the Minoan pottery in its vicinity refer again to the — unfortunately nowhere further specified — Minoan period.

The third — longest and most massive — section of the wall with two rectangular projections is placed eastwards of the city on the ridge of the hill, which is separated by a valley from the eastern hillsides of the Petsofas massive. In the case of the rectangular projections bastions or towers are most probably concerned, with the dimensions of 3 × 3 m and about 40 m distant from each other. The northern tower is in some places preserved up to the height of 3 m; the southern only up to the height of 0,5 m. The towers are built of smaller stones (the technique of “rubble masonry”). Between the towers and also about 40 m south of the southern tower the remnants of a straight wall are located — perhaps fortifications constructed in the “Cyclopean” technique from massive blocks of approximately 0,7 × 0,7 m. As regards dating, the same as in the two

(“Minoan Roads Research Programme”, for bibliography see CHRYSSOULAKI 1999); N. Schlager (*ÖJh* 1997 and 2001); K. Nowicki still continues to work on many of these projects (see e.g. NOWICKI 2000).

6 See e.g. VASILAKIS 2000, 205–206.

7 *ARep* 1983/84, 66: „There is also a possible length of fortification wall with rectangular bastion on the E approach from Patema and land route from Zakros.“

8 ZIELINSKI 1998, 223.

preceding cases is valid. This section probably walled off the path leading (north) eastwards from the city.

ARep 1983/84, 66; MACGILLIVRAY ET AL. 1984, 137, 157, pl. 9c; ZIELINSKI 1998, 222–223, 226 (cat. nos. 4H, 4I, 4O).

2) Guard house / “fort-like structure”

About 200 m southeast of the sc. Block N there are remnants of a special structure labelled as a “fort-like structure” with the dimensions of roughly 5×10 m. Only the north-eastern and a segment of the southwestern walls are preserved, in two places up to the height of 1,5 m. Up to four courses of masonry have been preserved here from rough non-worked blocks of approximately $0,5 \times 0,5$ m with little stones in the interstices. Both sides of the walls are rough, unfit for plastering. Apart from the remnants of the stone blocks and the rubble there are also fragments and even almost complete bricks (up to $0,13 \times 0,22$ m). Zielinski mentions pottery from Protopalatial and Neopalatial period in the area of this structure which in its disposition as well as in its architecture rather resembles the structure in a different periphery, labelled here as “Roussolakkos” (see the following point).

MACGILLIVRAY ET AL. 1984, 136, 140–141, fig. 3, pl. 9a; MACGILLIVRAY — DRIESSEN 1990, 401; ZIELINSKI 1998, 223–224, 478–479 (cat. no. 4J).

3) Guard house at Roussolakkos

Tzedakis et al. mention the “poste de garde” in this site guarding the entrance to Palaikastro from the east. A fairly damaged (perhaps only the western wall has been better preserved in situ — stone blocks of about $0,5 \times 0,75$ m) rectangular structure is concerned, with the approximate dimension of 5×10 m, which rather resembles the structure located southwest of the sc. Bloc N (see the preceding point). On that spot, apart from the pottery from the Protopalatial and Neopalatial period, several large fragments of bricks have been preserved as well.

TZEDAKIS ET AL. 1990, 60–61, no. 2; ZIELINSKI 1998, 227, 480 (cat. no. 4P).

4) Remnants of the building at Kephalki

MacGillivray — Driessen interpret the remnants of the building, which have, unfortunately, been already removed, as another possible observation post / guard house and date them back to MM IB / IIA.

MACGILLIVRAY ET AL. 1984, 131, fig. 1; MACGILLIVRAY — DRIESSEN 1990, 401, 411.

5) Remnants of the structure at Angathia

The remnants of this building with “megalithic” walls resemble in its disposition guard houses from MM II, although in the exploratory trenches only the LM III ceramics was discovered. Thus, a guard house built in Protopalatial period and (re)inhabited also in LM III is most probably concerned.

MACGILLIVRAY — DRIESSEN 1990, 401–403, 411.

6) “Megalithic farmhouse” at Aghia Triada

Bosanquet discovered here remnants of a structure with massive walls and believed it to be a farmhouse; MacGillivray — Driessen, however, according to the overall disposition assume that another guard house could be concerned. They date it into MM IB / IIA (construction) with possible reoccupation in LM III.

BOSANQUET 1901–02, 301; MACGILLIVRAY — DRIESSEN 1990, 403, 409.

7) Remnants of a rectangular building at Vagies

Under a modern house remnants of a rectangular building with massive walls were discovered by sounding; MacGillivray — Driessen again conclude that a guard house could be concerned.

MACGILLIVRAY — DRIESSEN 1990, 403.

8) “Dicta 4”

A guard house in the Palaikastro area on the sc. Route de Dicta.⁹

TZEDAKIS ET AL. 1989, 75, no. 4.

9) “Dicta 5”

A guard house in the Palaikastro area situated again on the sc. Route de Dicta; it lies on the southeastern hillside of the Petsofas massive.

TZEDAKIS ET AL. 1989, 75, no. 5; MACGILLIVRAY — DRIESSEN 1990, 410–412, fig. 6.

10) Plakalona — guard houses

They belong to the northern-most guard houses, which have been localised so far; they lie in the Palaikastro area south and east of the Petsofas massive. One of them has a simple disposition — a rectangular building with a partition dividing the inner space. From the western wall a segment of a wall comes out; some (later?) extension or an advance line of the fortification is probably concerned. Furthermore, remnants of another two guard houses have been preserved in this area. One of them was noted by Nowicki, who mentions the remnants of a settlement from Prepalatial and Protopalatial period and of a fort about 500 m east of the Kalamafka hill (situated on the border of a little plain Plakalona south of Palaikastro — Roussolakkos).

TZEDAKIS ET AL. 1990, 60–61, no. 5; ZIELINSKI 1998, 360 (cat. no. AO — AQ); CHRYSOULAKI 1999, pl. VI — 1, VIIIa — 3; NOWICKI 2000, 52–53, fig. 11.

⁹ The term introduced by TZEDAKIS ET AL. 1989, 52. This road was discovered within the “Minoan Roads Research Programme” and it connected Kato Zakros with Palaikastro.

11) Walling up of the wells in the sc. Area 6

In the area of new excavations north of the sc. Main Street and northwest of the sc. Bloc B at least two wells were set up which were simultaneously walled up. Driessen — Macdonald date the construction of the wells as well as their walling up to LM IB.

DRIESSEN — MACDONALD 1997, 232–233, fig. 7.82; MACGILLIVRAY ET AL. 1998, 226–228.

GENERAL DEVELOPMENT OF DEFENSIVE ARCHITECTURE AT PALAIKASTRO

1) EM

MacGillivray et al. do not quite exclude the possibility that the settlement could have been in some way fortified already in this period — perhaps along the line of several preserved fragments east of the later city centre (?) — however, there are no proofs supporting this hypothesis.¹⁰

2) MM I / II

The construction of at least some of the city fortification sections east of the (later) centre comes most probably under this period; MacGillivray et al. point out the resemblance of this wall section with two towers to the one at Myrtos — Pyrgos,¹¹ dated to Protopalatial period.¹² Several guard houses were also constructed — a “fort-like structure” southwest of the sc. Bloc N; guard houses at Roussolakkos, Kephalki and probably also at Angathia, Aghia Triada, Vagies, the sc. Dicta 4 and 5 and all three labelled (here) as Plakalona.

3) Neopalatial period

At least some sections of the city fortifications were repaired / rebuilt and continued to hold their function. Most likely, other parts of this fortification were erected connected with the expansion to the coast and with the setting up of a new port — so that protection of these new parts of the city would be secured; however, no such thing has so far been definitely proved. At least some guard houses worked even in this period — it can be reliably said about the “fort-like structure” southwest of the sc. Bloc N and the guard house at Roussolakkos. In LM IB in the sc. Area 6 wells were set up which were also walled up.

4) LM III

Fragments of the pottery support certain settlement in the guard houses at Angathia and Aghia Triada. However, it is not possible to determine whether these structures retained their military / guard importance and function.

¹⁰ MACGILLIVRAY ET AL. 1984, 137.

¹¹ *ARep* 1977–78, 71, 75, 79, fig. 3, 11, 22; DRIESSEN 1997, 71–72, fig. 8.

¹² MACGILLIVRAY ET AL., loc. cit.

CONCLUSION

From the examples listed above, the walls situated east of the town / city centre are undoubtedly of the greatest importance. According to Zielinski, in all these cases parts of the city fortifications are concerned — different sections, i.e. continuation of one and the same fortification system.¹³ MacGillivray et al. point out the similarity of the latter section with the towers and fortification at Myrtos — Pyrgos. Nonetheless, they also draw one's attention to the fact that north of it remnants of masonry are located which could have formed the continuation and further course of this fortification — those, however, suggest that the sc. East Beach Houses and the port would most likely stay out of the fortified area. Therefore it is possible, according to them, that an elder phase of the fortification from the EM or MM period is concerned, some of whose sections were no more used in the Neopalatial period, that is at the time when sc. East Beach Houses were constructed and when the port was extended.¹⁴

The remnants of the structures labelled as guard houses — i.e. the sc. Dicta 4 and 5, the structure in the vicinity of the sc. Bloc N, and, furthermore, at Roussolakkos, Kephhalaki, Angathia, Aghia Triada, Vagies and in the Plakalona area — have certain common features. The similarity between the structures close to the sc. Bloc N and at Roussolakkos has already been mentioned when dealing with them in the catalogue. To the extent that it is possible to judge from their — sometimes very badly preserved — remains, buildings of rectangular ground plan are concerned, built of greater, rough, non-worked stone blocks and their walls are rather massive (“megalithic”). As the existing results of the “Minoan Roads Research Programme” show, such structures are wedded to the system of Minoan roads and they function in cooperation with it. Their main task is the monitoring of the road traffic and its protection. The guard function, of course, joins in general monitoring of the area and warning the settlements and centres against possible danger. The guard houses were — when needed — able to take immediate action and to stop the traffic or movement on the roads for some time, but they were not meant (neither were they suitable) for waging war or any direct military action. Their position close to roads and entrances to settlements predetermines them rather for “police” protection and function. On the basis of this fact it is possible to infer that those structures in the Palaikastro area served as guard / check points and / or observation posts guarding and restricting the access to the city.

The least frequent construction type classified here as defensive architecture are the walls built around the wells in the sc. Area 6. According to Driessen — Macdonald they were built to protect the wells and to secure free access to them for the occupants of nearby houses. Furthermore, they believe that the construction of walls around the wells is a clear proof of the worsening of the general situation

13 ZIELINSKI 1998, 223, 226.

14 MACGILLIVRAY ET AL., loc. cit.

in LM IB and of the effort to secure and protect water sources.¹⁵ A similar effort to protect water supplies and to secure the access to them is well supported by evidence in the same period in the palace at Kato Zakros.¹⁶ The walls encircling the wells in the sc. Area 6 are labelled as defensive architecture from various reasons — they fulfil the separative and protective function. They prohibit the access to the wells and thus secure and hold the facility to use them only for the group of inhabitants who built these wells as well as their walls.

Thus, Palaikastro as a whole was protected by two types of defensive architecture at the same time — with the help of city fortification and with the system of guard houses warding the traffic and regulating the access to the city. This system was set up in the Protopalatial period already and at least some of the guard houses were used in later periods as well. As for city fortification, the situation is not quite clear. As MacGillivray et al. demonstrated, in the Neopalatial period there was an expansion towards the shore — and, thus, some parts of the city got out of the fortification walls.¹⁷ Consequently, the old line of fortification ceased to satisfy the requirements completely and then it would have been necessary to build new sections to secure the safety of the new city parts — however, such sections have not been proved (so far?). Nevertheless, the old fortification could have retained certain importance and could have been kept in good condition as a fortification of the city centre, where inhabitants could take cover in case of great and sudden danger.

The investigation of the defensive architecture in the Palaikastro area showed that certain attention was paid to the defence of Minoan settlements, even in periods in which (perhaps until recently) no such thing has been supposed. First and foremost the Neopalatial period has long been considered the golden age of the peaceful Minoan civilisation. Here in Palaikastro, however, certain proofs exist suggesting the use of some sections of the “classic” city fortification as well as guard houses in this period. Especially the functioning of the city fortification in the Neopalatial period is still very unusual or rather exceptional, because no quite reliable proofs have so far been presented concerning this type of defensive architecture built or at least still used in the course of this period. The fortification in Palaikastro discussed, however, arose and fulfilled its duty already during the Protopalatial period. In various sites examples of walls were documented which were — more or less likely, of course — interpreted as city fortification (e.g. Malia¹⁸ and Petras¹⁹). These examples can serve as a good

15 DRIESSEN — MACDONALD 1997, 232–233.

16 Close to the southern palace entrance an originally simple peribolos was built in LM I, it was later doubled in such a way that it encircled the well and secured a safe access to it. See e.g. PAE 1987, 293–295.

17 MACGILLIVRAY ET AL., loc. cit.

18 More sections of the walls located on all sides of the settlement with the palace — e.g. under the eastern side the sc. Quartier Z: ALEXIOU 1979, 51–52; VAN EFFENTERRE 1980, 182–

parallel. They also show that safety situation in general was not good in the Protopalatial period and that a rather great attention was paid to the defence of palaces and settlements.

The situation, of course, changed in the Neopalatial period — it was stabilised and consolidated; (more or less) peaceful conditions are supposed. Nonetheless, the defence was still taken into consideration, yet it was not of the same importance as before. As regards the types of defensive architecture, in the reigning peaceful atmosphere the sc. guard houses proved most useful, however, they secure and fulfil rather additional, non-military (in the sense of non-combat) defence function based on monitoring and warning against danger. The use of at least some parts of the “classic” fortification at Palaikastro thus partly changes the until now rooted conceptions of the general situation in the Neopalatial period, because it shows the necessity of certain higher degree of city / settlement defensiveness. Such situation and response to it by means of defensive architecture has not — perhaps until recently — been supposed at all. The construction of the defensive architecture — especially of the one, which does not provide only secondary protection — during the Neopalatial period has not been considered indispensable on account of the peaceful conditions alleged. As the Palaikastro example demonstrates, it will be necessary to somewhat re-evaluate and alter this — and probably some more — hypothesis on Minoan Crete.

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183, 266–267; ZIELINSKI 1998, 203 (cat. no 2W); north of the sc. Quartier A: ALEXIOU 1979, 52–54; VAN EFFENTERRE 1980, 266–267; ZIELINSKI 1998, 200–201 (cat. no. 2S).

- 19 On the foot of the hill with the palace a 17-metre-long section of a massive wall was discovered beneath an asphalt road: ZIELINSKI 1998, 232 (cat. no. 5E); TSIPOPOULOU 1999, pl. XXIIId, XXIIIId, XXXIVa–c.

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